



CROSSTALK

News Bulletin of the TRW Amateur Radio Club

Member, American Radio Relay League

JUNE 1986

** FD*71 ** FD*73 ** FD*75 ** FD*76 ** WAS ** WAC **

Garrett/W6TRW Repeater: 145.32/- .600(2A-PL) -- UHF: 442.000in/447.000out

CALENDAR FOR JUNE AND JULY

Wednesday	Each Wednesday, noon	Emergency Communications Team Check-in. 145.32 via repeater and simplex
Wednesday	Each Wednesday, 8pm	TRW/ARC Net on 145.32 MHz. Westlink tape, checkins, roundtable. Net Control, Don, N6KAW
Friday	Each Friday, 7-8am	Club Breakfast, S Cafeteria, VERY informal, good breakfast for less than \$2.00!!
Saturday	Jun 21, 8-11am	Swapmeet. Swapmeet moves to 3rd weekend due to Field Day!
Tuesday	Jun 24, noon	Club Meeting, R4/1041. Speaker will be Chuck Lobb, KN6H. Topic will be AMATEUR RADIO!
Sat, Sun	Jun 28, 29	ARRL Field Day Weekend. Club Station will be at the top of Friendship Park, San Pedro.
Friday	July 4, all day	Independence Day - Legal and company holiday. Lots of firework's in the South Bay.
Tuesday	July 8, after work	Executive Board Meeting. All members are welcome! At Shakey's Manhattan Beach, 2000 N. Sepulveda Blvd., just south of Marine Ave.
Monday	July 14, noon	Club Picnic, El Nido Park, on 182nd west of Hawthorne. Bring your badge or ID card.
Saturday	July 26, 8-11am	Swapmeet. Swapmeet returns to LAST Saturday of the month. Northwest corner of Aviation and Marine behind the Standard station.
Tuesday	July 29, noon	Club Meeting, R4/1041.

**** REMINDER: THE TRW/ARC SWAPMEET IN JUNE IS ON THE 3RD WEEKEND, JUNE 21ST, AS FIELD DAY IS THE 4TH WEEKEND ****

General Meeting 27 May 1986

Paul Lukas, N6DMV

Chris Wachs opened the meeting. The packet radio frequencies were announced on the blackboard: 80M-3,630.5, 40M-7,093.5, 20M-14,103.5, all LSB. The BBS phone number is 316-9507 Hit Carriage Return twice. Next Dale Jensen spoke about the rapidly approaching Field Day. He needs help for Field Day so please volunteer - his phone number appears on the last page of Crosstalk. Dale handed out sign-up sheets for FD. Please call him for info. Vice President Scott Gilmartin announced the speaker of the day: Norm Goodkin, K6KYH, who is associated with the Malibu Disaster Communication Service. Norm gave a very interesting and informative account of his experience as a disaster communication officer, providing insight into the operation of the CHP, Sheriff Department, Fire Department and all organizations participating in the disaster control. Thanks Norm for the fine speech! Bill Dews announced that the club membership is now at 206. He also stated that for the VHF contest the group will listen on 147.51 MHz simplex (10 minutes to the hour, every hour) - please give them a call and points. We welcomed a new member to the club: Scott Lo Bue, N6AZY. Welcome aboard Scott. Next, the following items were raffled off: 2-HBTs, 1-side cutter, 3-solar calculators, 1-IHQ balun, 2x100 QSL cards. The meeting was adjourned at 1300 local time. 26 people attended the meeting.

Sign in travel agency window: "Please go away."

ARRL National Convention

Bill Dews, K6AHO

The ARRL National Convention, September 5,6,7, will be a great time to visit San Diego. You hams with RV's should plan to really enjoy it all at a reasonable cost too. The campgrounds are close (2-3 miles) but if you want space you had better call and plan to pay for your spot now. One location is De Anza Resort, (619)273-3211. Remember that the 145.32 (-.600) machine in San Diego has no PL - hope to see you RV hams there! Advanced Registration prizes are a Yaesu FT-2700 and a Kenwood TR-2570. Register before 8/15/86 and it costs \$3.00 less. All of the usual National Convention stuff will be going on with some specials only San Diego could provide. A Youth Forum led by Astronaut Tony England, W00RE will be presented. A Friday Evening Dinner Dance Cruise in San Diego Bay will be available for the first 100 persons to sign up for it. The TRW/ARC has reserved a room at the Town & Country Hotel, which is the Convention Hotel, for Friday and Saturday evenings. It will be used as a hospitality room for TRW/ARC members only. A good place to cool your dogs with a tall cool one or just get to know some of the other members a little better. Those with ice chests please bring them along to hold the pop or whatever. So what are you waiting for?? Find the registration slip in this Crosstalk and fill it out and send it in and join the Gang in San Diego on September 5-6-7!!!



W6TRW Tower Raising Party

Bob Hume, KG6B

Thanks to the efforts of a hard working crew consisting of:

Mike Aust, WB6DJJ
Barry Allen, WA4TTG
Paul Herbert, KG6CR
Ralph Sellers, W6TUQ
Stan Harris, KG6MV
George Lee, W6IOW

A new 50 foot high Rohn 45 tower was erected on the roof of building 65 May 18th. The tower went up without a hitch in about five hours. Paul Herbert and myself worked topside while the remaining crew hoisted 10 foot sections up to us.

A special thanks is in order to associate member Stan Harris who supplied tools, know how, and labor for constructing the 3/16th inch stainless steel guy lines. Stan's work is rigging sail boats so he is a professional at working with wire rope. He assisted on three weekends prior to the tower raising party so that the guys were complete and ready to go.

The Rohn gin pole worked like a charm. It was quite an educational process putting a section tower up for the first time.

There is still more work to be done to complete the antenna. Namely

- o Install T2X rotator
- o Install 10 foot mast
- o Lift KT34XA in place
- o Run feedline to shack

June 7th. Antenna Working Party

Thanks to the efforts of the following TRW/ARC members we had a productive antenna working party!

Steve Barton
Dale Jensen, K6ZTI
Rothan Maxwell, NU6U
Ralph Sellers, W6TUQ
George Lee, W6IOW
Mike Aust, WB6DJJ
Jim Cox, K7JAJ
Paul Herbert, KG6CR
and Barry Allen, WA4TTG

The following tasks were accomplished:

1. Recut two bottom guy lines.
2. Adjusted tower plumb vertical.
3. Adjusted tension in all guys.
4. Lowered rotor shelf.
5. Installed T2X rotor.
6. Installed 10 foot mast.
7. Constructed wire rope boom guy for KT34XA antenna.
8. Ran coax and rotor control cable from shack to tower base.
9. Reworked cable conduit pipe feeding through roof.

The next working party will raise the KT34XA in place and complete rotor and coax connections. We are getting close to completion of this project. Anyone interested in helping with these tasks can call me on 217-3624.

The TRW ARC now has a good kit of tools for members wishing to put up Rohn 25 or 45 tower sections. Items available are:

- o Rohn EF2545 gin pole
- o Stainless steel wire rope cutters
- o Nicopress compression tools
 - One up to 1/4" wire rope
 - One for 3/16" wire rope
- o Drift pin for centering section holes prior to bolting
- o 120 feet of high quality 3/8 inch boat rope for lifting sections
- o Climber's Safety Belt

Rental of the above items to non TRW ARC members is also available upon request. See Bob Hume KG6B.

Field Day

Dale Jensen, K6ZTI

Field Day will be June 28, 29 this year. We will again be at the top end of Friendship Park. The park is located up the hill off of 9th and Western in San Pedro. The rules are pretty much the same as last year, allowing 24 hours to set up and 24 hours to operate. We will start set up at 11:00 am Friday June 27, start operating at 11:00 am Saturday and shut down at 11:00 am Sunday, same as last year. It is important that no one go near the park before 11:00 am Friday to comply with these 24 hour rules.

The following has been accomplished:

A telephone call with a follow-up letter to the LA County Parks and Recreation. Our Club is now classed as an Annual Event at the park, and we have the park reserved for Field Day every year.

Phone call to Ed Torres was made to reserve the generator(s), electrical cable and light stand. The generators have been tuned up so they should run much better this year. A TRW pick-up truck will not be available this year. We will need to supply a truck with a pipe rack or a stake bed truck.

Bill, KE6LB, is donating a 28 ft tower for the 15 Meter SSB station. The tower must be picked up at his PV QTH Friday evening June 27. It is 20 feet long with a push-up mast and weighs 200 lbs. Bill will be on vacation and not be with us for Field Day. If you can transport this tower call Dale for Bill's address and phone number.

Paul, KG6CR, will manage the generator(s) again this year. He will pick up the generators Friday afternoon. Frank, WA6RAY has also offered to help. Two units are planned, one as a backup.

The following have volunteered to help with setup/tear down: Frank, WA6RAY; Jim, K7JAJ; Ren, KG6NH and Paul, KG6CR. We still need more especially for tear down and return of gear to the ham shack.

Operating stations:

20 CW: --- OPEN ---

20 SSB: Carl Kennedy, WB6TDE; Frank, WA6RAY; Bob Smith, KF6II and Dave WB6VFK

40 CW: Bob, KG6B. Needs help with the antenna.

40 SSB: Ollie does not have a motor home or a rig but does have his antenna! Ollie needs to find shelter and to borrow a rig, preferably an Atlas 210. Dave, WB5VFK will help.

15/80 CW: Paul, KITKL and John, N6JLS

15/75 SSB: Ren, KG6NH; Dave WB5VFK and Bob, KF6II

Novice: Frank Cartier Jr., KB6LSE

Packet: Jim, K7JAJ on 80, 40, 20 and 2 Meters with help from Bob, KF6II

VHF/UHF FM: --- OPEN ---

VHF/UHF SSB: Chris, WA2KDL

The following are bringing rigs: Bob, KF6II and Dave, WB5VFK.

Food: John Keller, N6JLS, will fix a pancake breakfast Sunday Morning. We need help with the other meals!

Work or Resources remaining to be completed:

Visit park maintenance man to stake sprinkler heads, get key to the gate and open the restrooms

We need tents, travel trailers, motorhomes, campers, vans, etc. for shelter.

We need a pickup truck with a pipe rack or a stake truck. Someone to stay with the stuff Friday night and keep it from growing legs.

Send out a questionnaire to Associate members.

Send out a mailer with detailed instructions.

Well, we have got a lot to do and not much time in which to do it. Your Field Day Chairman has been pretty tied up this year due to work travel assignments and a bad back. I hope you can all pull together and have a good Field Day. Those of you who haven't sent back your Field Day questionnaire letter, please do so if you plan on participating, or call Dale Jensen at (213)217-4876 at work or (213)202-6777 at home.

Novice Phone Privileges Proposed

"One of the fundamental purposes of amateur radio is to maintain a pool of operators, technicians and electronics experts. In light of the apparent downward trends in Novice operators, we are concerned that a valuable national resource is being diminished. Accordingly, we will propose rule making in the hope that an enhanced Novice license will benefit the service and reverse the trends." ...from FCC Notice of Proposed Rule Making - PR Docket 86-161.

You have all heard the concern about the dwindling ranks of Novice operators, dwindling not because of upgrading but because of dropping out, and how Amateur Radio needs to encourage new young people to join the ranks of the amateur community. The statistics, from the FCC Personal Radio Branch are staggering.

	Year 83	Year 84	Year 85	3 Year Total
New Novices:	18,744	17,392	15,913	52,049
Dropped Out:	9,129	14,883	9,615	33,627
Year End:	86,781	80,461	76,337	-10,444

The credit for being the initial author of "Novice Enhancement" belongs to Larry Garens, KC50Q, who filed four petitions with the FCC before the ARRL filed theirs. Garens has since filed a fifth petition. The Garens' petitions and the League petition are basically the same.

In their NPRM the FCC has proposed Novice and Technician access to:

28.1-28.3 MHz - Morse Code, Digital Info. 200 Watts max.
28.3-28.5 MHz - Single Sideband Voice (J3E) 200 Watts max.
220-225 MHz - All current Amateur modes 25 Watts max.
1246-1260 MHz - All current Amateur modes 5 Watts max.

Needless to say, Technician Class license holders will also get these privileges. These rules at the present are PROPOSED ONLY!! The general feeling is that the FCC will enact something before the end of the year.

The FCC did not agree with the ARRL's suggestion that two volunteer examiners administer Novice examinations instead of the present one, and invited comments on this issue.

The 90 day public comment period on the Notice of Proposed Rulemaking closes on July 16.

If you wish to read the entire NPRM it can be found (with appropriate comments by the ARRL) on pages 48 through 51 of the June issue of QST. Item 19 of the NPRM states how to comment on the NPRM.

"19. In accordance with Section 1.419 of the Commission's Rules, 47 CFR 1.419, formal participants must file an original and five copies of their comments and other materials. Participants who wish each Commissioner to have a personal copy of their comments should file an original and eleven copies. Members of the general public who wish to express their interest by participating informally may do so by submitting one copy. All comments are given the same consideration, regardless of the number of copies submitted. Each set of comments must state on its face the proceeding to which it relates (PR Docket Number) and should be submitted to: The Secretary, Federal Communications Commission, Washington, D.C. 20554. All documents will be available for public inspection during regular business hours in the Commission's Public Reference Room at its headquarters in Washington, D.C." The PR Docket Number that you must show on the face page of your comments is 86-161.

This is your hobby, avocation, interest, affliction, whatever!! If you have something to say about this, pro or con, now is the time to do it. Needless to say, mindless rambling about the NPRM will not have much of an effect. Sit down, READ THE NPRM, gather your thoughts and write something meaningful, send it in.

TRW/ARC Picnic

Another excellent picnic was served up by the dynamic duo of Jim and Luella Wike! It was unfortunate that Mother Nature did not deign to bestow upon us a warm, sunny day but it didn't seem to bother the 18 TRW/ARC members that showed up. On the menu was the famous Wike Chili Dogs, guaranteed to make the sun shine in your tummy and keep you warm for the rest of the day. Many members found the warm food so good that returns for seconds were performed by almost all the attendees. The usual compliment of soft drinks and 807s were in abundant supply but the real treat of the picnic was the Lemon Cake for desert. Early tasters were seen rushing back to the food table for seconds, thirds and fourths and then had to be beaten off so that some of the unfortunate late-comers could get a few of the remaining crumbs.

If you have missed the first two picnics you have only three more chances to get your fill of free food and drink. The next picnic will be on Monday, July 14th at El Nido Park, 182nd Street between Hawthorne Blvd. and Inglewood Ave.

Tidbits from the Jolly Little S...

Like all good things that from time to time to time get temperamental, my new daughter and my new PK-80 TNC decided to act up. The solution to the TNC was send it back, which I did with enough background info to hopefully give the poor soul who would work on it a good idea of what the problem was. As it turns out the AEA PK-80 has many diagnostic capabilities that virtually pinpointed the problem. In fact 9 days after I sent it to AEA near Seattle, it reappeared on my porch with a brand new Serial Input/Output (SIO) chip installed. It has been running all day to verify the problem has been resolved. It was frustrating being in the middle of a file dump and have the TNC lock up and refuse to listen to the connected station. So a word of warning!! All of your efforts to get your TNC operating for the first time may be in vain if your TNC is acting up, and the TNC is so complex that it may be difficult to figure out what the problem is. Operator error is always the first suspect. The new TNC2 or it's clones like the AEA PK-80 have many diagnostic capabilities and I recommend the purchase of the TNC2 design for those about to enter the world of Packet Radio.

Now if I could just take my daughter back to the hospital and have her SIO chip replaced under warranty all my problems would be solved!

New Members. - - Old Members

License expirations coming up in the next few months are:
W60DI, Bob Lace, July

Welcome to the Club:

Jack Basham, K6JTU, A General ticket holder, Ham for 34 years and an ARRL member. Jack is interested VHF and Computers, which seems sensible given the band conditions these days.

And Welcome Back:

Barry Allen, WA4TTG, who re-upped just in time to officially help in his usual fantastic way with the 40 meter CW operation for Field Day.

Bill Dews reports that badges have been ordered for Bill, N6MEL; M. Wong; John, W6VYX; John Horvath and Bob W6YUY. These should be available by the next meeting.

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There is a story about Gary Player, the pro golfer, blasting the ball out of a bunker and into the hole. "That was lucky," remarked a spectator. "Yes," replied Player. "But, you know, the more I practice, the luckier I get."

May Swapmeet Notes

Frank Cartier, W6RAY

The June Swapmeet will be held on the 3rd Saturday in June, not the last Saturday which is the normal Swapmeet day. This is due to the ARRL Field Day activity falling on the last Saturday of June this year. Please make a note of this change and pass the word around. Notices have been distributed at the last two Swapmeets and announcements have been made on repeaters, but it is essential that each Club member pass the word along. The May Swapmeet was another well attended activity with all of the sellers' spots occupied by 0900. The participants were generally very cooperative, however the problem with leaving trash behind such as boxes, coffee cups, "boat anchors," etc. is getting worse, not better! There seemed to be an improvement in April but a definite worsening in trash left behind after this May Swapmeet. Sellers must make sure that their area and the area around them is totally free of trash and debris prior to departure. Anyone caught leaving trash behind will not be allowed to enter the seller's lot at future Swapmeets. There was also a marked increase in the sellers who were not out of the lot by 1130-1200. We close at 1130 and all sellers must depart by 1200. There are sellers who are chronically late in leaving the lot. You are risking being barred from participating as a seller if you continue to procrastinate in leaving the seller's lot! The July Swapmeet will feature an auction. This will enable anyone with excess equipment and hardware an opportunity to unload items and pocket some cash. The auction will run from 0900 to 1100 and the TRW Amateur Radio Club will receive 10% of the sales price. We have a special guest auctioneer and this activity should be a lot of fun. If the auction is successful we will hold them periodically. As you have no doubt noticed by now we have provided a portable sanitation unit for the last two Swapmeets. Please make a point of donating toward the cost of this service during the Swapmeet. Give your donation to one of the Volunteer Swapmeet Supervisors wandering around. Speaking of volunteers, the May Volunteer Supervisors were:

Frank Cartier, Jr., KB6LSE

Paul Herbert, KG6CR

and Stan Johnson, W6EKK

Thanks to Frank, Paul and Stan for the outstanding job on a busy day. The Volunteer Supervisors for the June Swapmeet are:

Ed Thornly, W6RXD

and David Burdett, WB6DVH

Since we have been filling the seller's lot at the past two Swapmeets, participants are requested to strictly adhere to the 1 space per seller rule. If 2 or more sellers carpool together, as some do from San Diego, then more than one space can be used. Please cooperate so that we can fit in all those who show up. Club members that attend the Swapmeet are reminded to observe that all of the rules are being followed. If you see someone creating a problem point out the person to one of the Volunteer Supervisors. We monitor the output of the TRW/ARC repeater on 145.32 MHz. With summer coming up we will probably see some large turnouts. If you haven't been contacted for Swapmeet duty yet you can pick a month by calling me at (213)535-6985 during the day.

73 and see you on June 21st this month at 0700!!

Executive Board Meeting 10 Jun 1986

Paul Lukas, N6DMV

TRW/ARC President Chris Wachs opened the meeting. In attendance were: Frank Cartier, Jim Cox, Bill Daley, Bill Dews, Paul Herbert, Bob Hume, Dale Jensen, John Keller, Paul Lukas, Dave Stockwell, Chris Wachs and Jim Wike. The minutes of the last meeting were accepted as printed in the Crosstalk. Dave Stockwell handed out the financial report and a discussion of the budget followed.

...more Executive Board Minutes

Jim Wike reported that he is ready for tomorrow's Club Picnic. Bob Hume reported on the Club antenna status: The tower is up and coax from the shack is in place. He is in need of volunteers to help put up the beam. We have safety belts in the shack in case someone has to climb the tower. Please do not attempt to scale the tower by yourself and without the safety belt! Bill Daley will be attending the next LAACARC meeting on the first Tuesday in July. Dave Stockwell volunteered to accompany Bill. Bill Dews said that we now have 208 members in the Club. Paul Herbert had no new news concerning SEA. Frank Cartier gave an account of the last Swapmeet. Some people left "boat anchors" again in the lot. The Club reminds all people attending the Swapmeet that you are on private property and TRW can revoke the Club's privilege to hold Swapmeets in case the lot is left in a mess. This puts Club volunteers in the position of hauling away the junk. We remind all buyers and sellers that you are the guests of the TRW/ARC. Please don't wear out your welcome to the Swapmeets by leaving unwanted items in the lot. Jim Cox provided a report on the emergency operation test of the 2 Meter repeater. The machine was switched to emergency (battery) power and held up under normal operation for 50 hours, allowing a deep discharge cycle. Jim is looking for a volunteer to keep the HT radio batteries charged. Dale Jensen reported on the Field Day preparation status. Dale stated that he will have difficulty coordinating Field Day as he will be out of town until the Friday before the Field Day weekend. Paul Lukas discussed the publicity aspect of the Field Day operation. Chris closed the meeting a 1908 local time.

From the Library

George Lee, W6IOW

A quick look at the June issues of:

QSI: VHF Meteor Scatter (Want to know a little more for VHF DXing?).
Introducing the Series-Parallel Network (a wide-symmetrical bandpass impedance transforming network).
Adventures in Satellite DXing (about antenna positioning).
A Small, High Efficiency Loop Antenna (a multiband loop). Note: Library has a book by the author of this article!
Antennas: From the Ground Up (a discussion of).

HR: Turning that Big Array (Homebrew this inexpensive quiet rotator for your big antenna).
Secrets of Successful Low-Band Operation - Part 2 (a look at what other successful operators do).
A Regulated Screen Grid Power Supply - using a TMOS Power FET as a pass transistor.

CQ: Product Review of Microwave Modules Ltd. MML432/100 Power Amplifier (14dB gain at power out of 100W)
How to build a 2 Meter Oscar 10 Antenna (17 element).
Packet Radio: How to work it.

73: Product Review of Kenwood TS811A & Icom IC-471A.
Product Review of MFJ-1270 TAPR-2 Packet TNC.
A Walk through the VHF Spectrum
Two to Ten (An FM Transverter)
Simplex Repeaters?
Those Tantalizing Twos (the Icom IC-2AT and IC-02AT)
Computer Rotor Control

We have received a few copies of "Gateway," an ARRL Packet Newsletter. It is available in the ham shack.

An Introduction to Working PACKET Julian Macassey, N6ARE

This introduction tells you how to work Packet. Packet is like Scandinavian free love, you will find out nothing about it until you do it. No explanation is going to be given about how these things work. Just instructions on what to do. Later, when you understand the what in Packet, you can find the how. The how is available in printed literature and also on various Packet Bulletin Boards (BBS). In Southern California WB6YMH-2, N6CXB-1 and N6LUC-1 have megabytes of useful information. The mail function on various BBS also carry all the latest Packet news.

You will not learn anything about Packet by getting on for 10 minutes, getting frustrated and quitting for two weeks before giving it another 10 minutes of your time. Like any skill, time spent equals competence gained.

SETTING UP YOUR TNC

These are generic instructions and should get most TNCs going. This includes: TNC1, TNC2, PK-64, PK-232 and KPC2.

First get into the command mode. You do this by entering a Control C (often indicated "C"). (ed. This assumes that you have a telecommunications program, for talking to another computer via a modem on your computer, and know how to operate it.) A control character is entered by holding down the "control" key and hitting the letter, just like you would type a capital letter by holding down the shift key and hitting the letter. On most terminals control characters are not seen on the screen, but they do things to the computer program. PK-64 users get into command mode by hitting the F7 key.

On the screen will be seen the command prompt "cmd:". Enter the following commands:

NOTE: <CR> means carriage return, Return or Enter. They all do the same thing.

cmd: MY N6ARE <CR> (Here you would type YOUR callsign)

cmd: TXD 40 <CR> (For TNC1's this should be 10)

cmd: RES 0 <CR> (Sets response time, not on TNC1's)

cmd: BE 0 <CR> (Turns off the beacon)

cmd: CW OFF <CR> (Turns off CW ID on TNC1's only)

cmd: P 256 <CR> (Sets packet length to 256 bytes)

If you have a TNC1 or Kantronics, now "PERM" the changes and then RESET. TNC2 users have automatically "permed" commands. PK-64 owners can save to disk or re-enter these parameters each time they boot up.

IN AND OUT OF COMMAND MODE

To go from Command mode to Converse mode, whether you are connected to another station or not do this.

cmd: CONV <CR>

TNC2 users can just do,

cmd: K <CR>

PK-64 users hit F7 a couple of times. If you are in Converse mode and not connected and type onto the screen and then hit <CR>, a packet will be transmitted. This is called Unproto mode. If you are connected to another station this is called "connected Converse mode." In

order to transmit what has been entered on the keyboard, the <CR> must be hit. This is the character code that signals to the TNC that you wish to transmit, your "push to talk button" so to speak. If you wish to continue typing for more than one line but do not wish to transmit it, you type at the end of the line ^V<CR>. This will move the cursor to the beginning of the next line but not transmit what has been typed. You can continue to do this for many lines and when you finally hit the <CR>, the whole damn thing will go out as one packet. DO NOT let your computer/terminal "word wrap" and take you to the next line, as it will cause double spacing and mid-word breaks at the other end.

To connect to another station type:

cmd: C N6JLS<CR>

The call sign would be of the station you wish to connect to.

RADIO ADJUSTMENTS

These are critical and, if not correct, all of the parameter set-up given above will not help. Your TNC will work poorly if at all.

TX DEVIATION: This is very critical. The TNC manufacturers give guidelines as to the AF voltage entering the Mic input for correct deviation. This will help to get the deviation right. The best way to do it is with a deviation meter. Set the deviation for between 2 and 3 kHz. Any more than this and you will do the following:

1. Cause adjacent channel interference
2. Cause distortion on channel so the packets cannot be decoded.

RX THRESHOLD: Most TNCs have LEDs on the front panel to adjust for this. One way to do this adjustment is get on a busy channel and adjust radio RX gain pot for solid copy. Note: don't be surprised if the "audio" volume is "low" for best reception. The TNC, not your ears, is listening to packets. Too much gain and you will hear fine but see no packets on the terminal. Too little gain and you will have the same problem.

Once you have the adjustments right for TX and RX, LEAVE THEM ALONE!! Messing with parameters when you don't know what you are doing, will degrade TNC operation. When you are familiar with Packet, twiddle away.

BBS OPERATION

BBS operation is one of the major uses of Packet. Use your local BBS, all the help you need is available on it or via it. Best way to use a BBS is:

1. Read the command menu.
2. Read the HELP file.

(ed. With the WB6YMH-2 BBS all you have to do is answer yes to the "Do you want info?" questions and have your computer capturing the data BEFORE you say yes, and you will get 7 1/2 pages of very good information, part of which is this article.)

ARRL 1986 NATIONAL CONVENTION September 5, 6, & 7, 1986 REGISTRATION DATA FORM (Print or Type)

Name _____ Call _____
Street _____
City _____ State _____ ZIP _____

Make Badges As Follows:

Call _____ Name _____ City _____
Call _____ Name _____ City _____

Pick up Tickets and Badges at the Door.

To Reserve a Room at the Convention Site, Call
T & C Hotel and ask for ARRL rates. Toll Free:
California (800) 542-6082, USA (800) 854-2608
CONVENTION INFO: (619) 292-7918

MEETING SITE TOWN & COUNTRY CONVENTION CENTER SAN DIEGO, CALIFORNIA

How Many	Cost	Amount
_____ Advance Registrations	\$ 7.00	_____
_____ Registration After 8/15/86	\$ 10.00	_____
_____ Banquet (Prime Rib)	\$ 25.00	_____
_____ Ladies Lunch (1st 100)	\$ 10.00	_____
_____ Dinner Cruise (1st 100)	\$ 33.00	_____
Total Enclosed		\$ _____

18 Years & Under No Charge For Admission At Door

Postmark Before April 15, 1986 is Eligible For
ALL PRIZES!!!!!! Mail With Check Payable To:
SANDARC, P.O. Box 82642, San Diego, CA 92138